



3½" FLOPPY DISK DRIVE

installation guide

**COMMODORE®
AMIGA® 2010
3½" FLOPPY DISK DRIVE
INSTALLATION GUIDE**

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1. Introduction

The A2010 3½" Floppy Disk Drive is identical to the internal floppy drive that is already installed inside your Amiga 2000. By adding the A2010 to your Amiga 2000, you eliminate the disk swapping involved when using only one floppy drive. With two drives you can access information and perform disk operations, such as copying disks, much faster.

The A2010 is easily installed inside the A2000. Before you begin, check to make sure that you have received everything:

- A2010 3½" floppy disk drive
- Set of hardware (4 screws, 4 washers, 4 standoffs)
- Jumper

You should also have on hand your Workbench™ disk, one blank disk, and one "scratch" disk—a disk that you will not miss if it is damaged. (A formatted disk will suffice.)

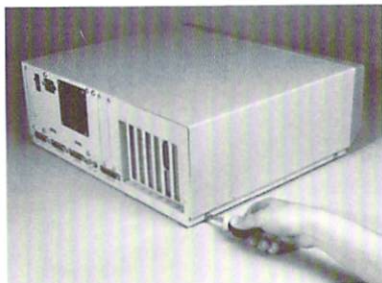
2. How to Install Your A2010 Floppy Disk Drive

WARNING: Unplug the Amiga 2000 before installing the A2010. Installing the A2010 with the power on could cause possible injury to yourself and damage the equipment. Commodore will not be responsible for any damages caused by improper installation of the A2010. Such improper installation will void the warranties on both the Amiga 2000 and the A2010.

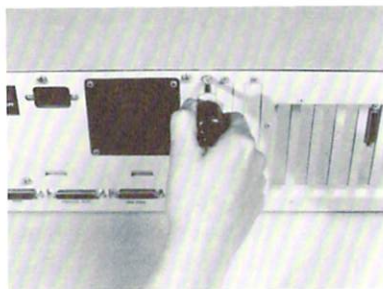
Before you start, disconnect the mouse and the keyboard from the front of the Amiga and the power cord and any peripherals attached in the rear.

Removing the Amiga's Cover

Remove the two screws on the lower left side of the Amiga that hold the metal cover to its base. Remove the two screws on the lower right side of the Amiga. Put the screws and washers aside for later.



Remove the center screw from the rear of the Amiga. Be careful to unscrew the correct screw as shown.



Turn the Amiga so that you are facing the front of the machine; the disk drive should be facing you. Grasp the cover on both sides, slide it towards you, and lift upward.

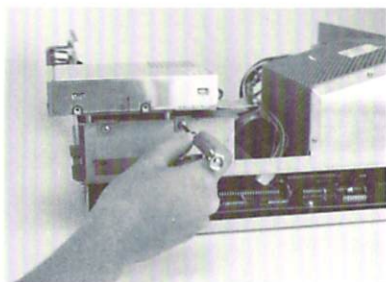


If the cover gets stuck, do not force it. Look under the top of the cover towards the middle. Check to see if any wires or cables are caught under the small projection where the middle screw had been attached. If anything is caught, gently untangle it, and continue to slide the cover off.

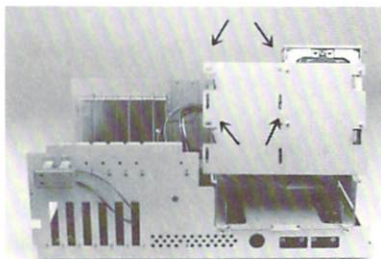
Installing the A2010

Notice the metal plate where the first internal floppy disk drive is attached. The A2010 will be mounted on that plate to the left of the first floppy drive. To secure the screws that will hold your A2010 in place, you need to lift up the plate.

Four screws hold the metal plate in place; two on the right side and two on the left. Remove the four screws, and gently lift up the plate.



Notice the four slight oblong holes in the plate. The screws for the A2010 will go through these slots.



Check the hardware that you received with the A2010. It will be one of two sets:

SET 1

4 threaded standoffs
4 short screws
4 flat washers

SET 2

4 standoff washers
4 long screws
4 flat washers

Using Set 1 Hardware

The four standoffs are threaded on each end. One end of each standoff will be screwed into the A2010. A short screw will be screwed into the other end of each standoff to hold the A2010 in place.

Screw the four standoffs into the underside of the A2010. Working from the underside of the metal plate, hold the A2010 so that it is flush against the first internal floppy drive.

Put a flat washer over one of the short screws and insert the screw through the metal plate and into the standoff. Hand tighten the screw. Repeat this process with the other three holes. When you have all four screws in correctly and you are sure the A2010 is flush against the other drive, tighten the screws.

Using Set 2 Hardware

Working from the underside of the plate, put a flat washer over one of the long screws and insert it through a hole in the plate. (We suggest starting with the rear hole immediately next to the first floppy disk drive.) Place a standoff washer on top of the screw. Holding the A2010 so that it is flush against the first floppy drive, place the A2010 on top of the standoff and hand tighten the screw.

(Repeat this procedure using the front hole immediately next to the first disk drive. Then move to the other rear hole, and finish with the remaining front hole.)

When you are sure that the screws are in correctly and that the A2010 is flush against the other drive, tighten all four screws.

Replacing the Metal Plate

After the A2010 is mounted, put the metal plate back in place, insert the screws, and hand tighten. You should have some leeway to slide the plate back and

forth, since you need to make sure that the face of the floppy disk drive is flush with the face of the Amiga.

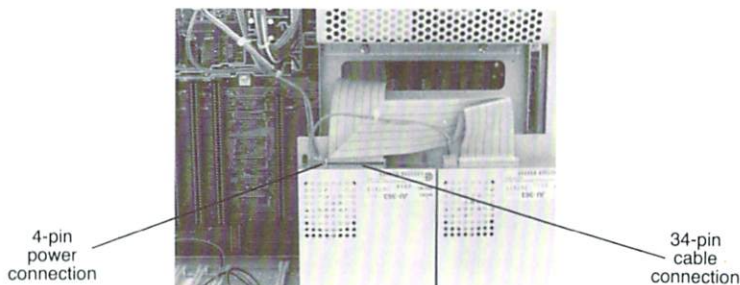
First, however, you must remove the bezel in the Amiga's lid that is covering the opening for the A2010. Simply unscrew the two screws that hold the bezel in place.

To check that the drives are flush, slide the metal plate forward, and place the cover over the top of the machine **without replacing the screws**. If the disk drives are not flush with the face of the Amiga, gently slide them back until they are in place. Carefully lift off the cover, and tighten the screws holding the metal plate.

Connecting the A2010 to the A2000

There is a 34-pin ribbon wire connector already inside your A2000. Notice the colored stripe running down one edge of the cable. Hold the cable so that this stripe is on the left side as you face the front of the Amiga. Now, gently slide the ribbon wire connector onto the connector on the rear of the A2010.

Warning: Be sure to insert the cable gently so that you don't damage any pins. When you're positive the cable is oriented properly, insert it all the way.



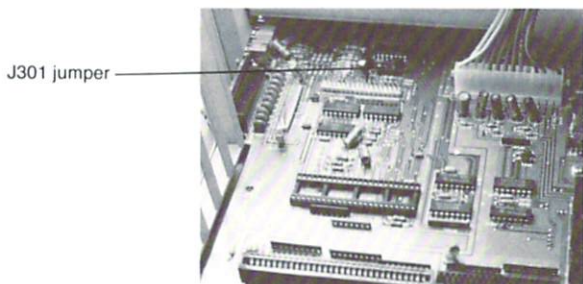
You must also connect the A2010 to the Amiga's power supply. Locate the cord running from the power supply to the first floppy disk drive. There is another small, four-pin connector on this cord that you will attach to the power connector on the A2010. **Be careful. If the connector does not fit all the way, you may have the connector backwards; turn the connector around, and try again.** (When looking at the power connector from the front of the Amiga, the orange wire should be towards the left and the yellow wire should be towards the right.)

Placing the Jumper on the A2000 Board

After the A2010 is properly hooked up, you need to set a jumper on the A2000 board so that the machine knows a second floppy drive has been installed. The location of the jumper will vary depending on the part number of your board. The part number is in the front, left corner of the board. It will be either 312723 or 380705-01.

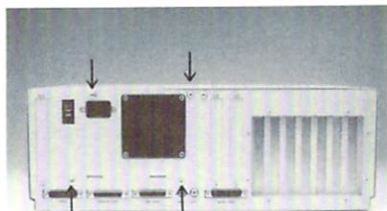
If your board has part number 312723, you need to locate the J301 jumper block. (It is just to the left of the power supply and to the right of the CN303 floppy drive cable connector. In fact, the floppy drive cable may be covering the jumper block.)

The J301 is normally “open” to signal that only one internal floppy drive is in place. “Close” the J301 by placing the small, black jumper over the two upright prongs, as shown below.



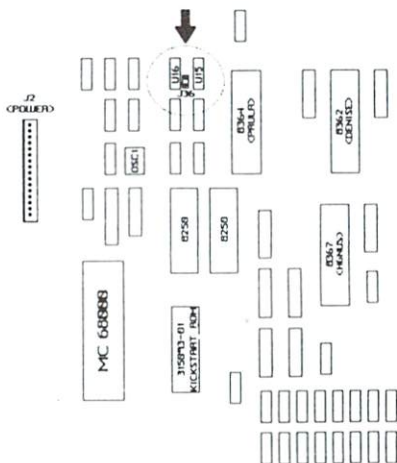
If your Amiga has part number 380705-01, you need to locate the J36 jumper block. To reach the J36 you must remove the power supply sub-chassis.

Six screws hold the sub-chassis in place. The first two screws are located above the mouse and keyboard ports on the front of the Amiga. The remaining four screws are in the rear of the Amiga as shown below.

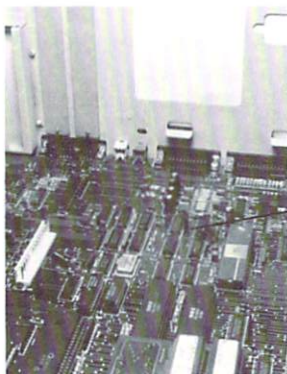


Remove all six screws and disconnect any cables that are attached to the board. Carefully lift out the sub-chassis.

Locate the J36 using the diagram below.



Close the J36 by placing the small, black jumper over the two upright prongs, as shown.



J36 jumper

3. Running a Test of the A2010

After everything is hooked up, you should run a quick test to make sure the drive is installed properly. You'll need a "scratch" disk, such as a formatted disk, and a blank disk. (Don't use a disk you don't have a back-up for!) Without replacing the Amiga's cover, hook up your monitor and the power. Boot your Amiga using your Workbench in the first floppy drive (df0:).

Take your scratch disk and set the write-protect tab so that the disk is write inhibited (you should be able to see through the small hole), and insert the scratch disk in the A2010 (df1:). Using either the CLI or the Workbench, you need to check that the A2010 is reading the disk properly.

To check the disk using the Workbench, click on the scratch disk's icon, then choose Info from the Workbench menu. When the Info window appears, the status gadget should show "Read Only". Close the Info window and remove the scratch disk from the drive. Change the write-protect disk so that it is write enabled (there should not be a hole in the disk). Again select the disk's icon, and choose Info from the Workbench menu. This time the status gadget should show "Read/Write."

To check the status using the CLI, simply open a CLI window and type "info". When the disk is write-protected, the CLI should display that the disk is read only. When it is write-enabled, the CLI should display "read/write".

Finally, try a quick disk copy using the new drive. Put a scratch disk into the original floppy drive (df0:), and put a blank disk into the A2010 (df1:). Now that you have two drives, a quick way to copy a disk is to drag the icon for the disk you want to copy over the icon of the destination disk. You can also copy the scratch disk by using the Duplicate command in the Workbench menu or the CLI's DISK COPY command.

If any of these tests fail, go back and double-check your cable and power connections.

Once the A2010 is installed, properly connected, and tested, you can slide the cover back onto its base and replace the five screws. Remember to use the washers to hold the cover tightly in place.

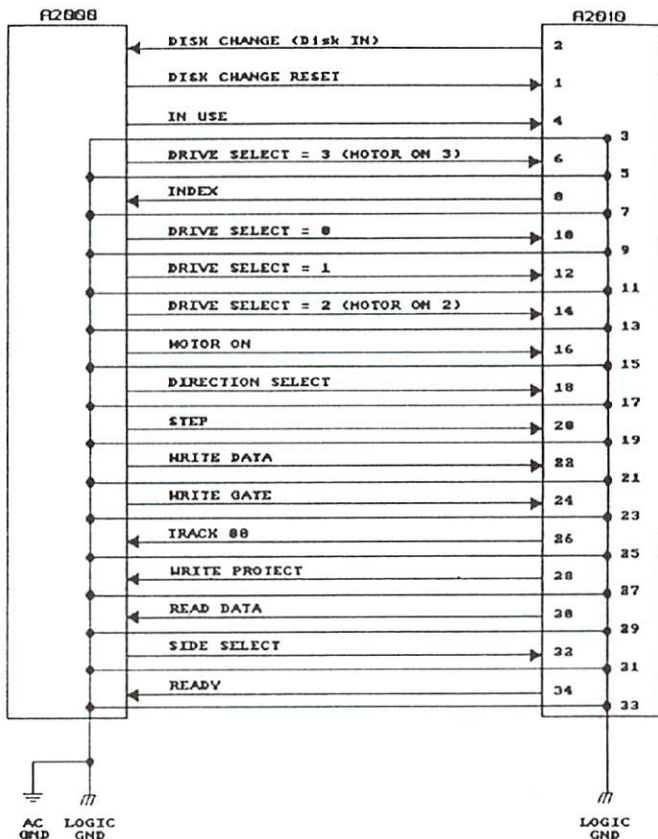
4. Technical Specifications

Features & Characteristics

- *Single speed MFM read/write format
- *880Kbytes formatted storage capacity
- *Double sided, double density
- *Formatted in 160 tracks with 11 512 byte sectors each
- *Reads an entire track at a time
- *Supports fast data transfer rates

Power Requirements: Power supplied by Amiga system

34-Pin Ribbon Cable Diagram





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